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ABSTRACT

Homeschooling, one of the fastest growing educational alternatives, is enjoying increasing respect from educators and parents alike. This is partly because homeschooling children score as well and often better on standardized tests than their publicly schooled counterparts. However, the vast majority of homeschooled students come from the households of their married biological parents, who have above average incomes. Homeschooling parents also have much higher than average educations. Homeschooled students also watch much less television than their publicly schooled counterparts. All of these demographic characteristics have been proven to influence academic achievement. Homeschooling organizations are completely unsure of the number of students being homeschooled nationally. It is, therefore, possible that the high test scores of homeschooled students are inconclusive evidence of the actual quality of homeschooling instruction; these test scores can instead be attributed to nonrepresentative research samples and demographic characteristics of the homeschoolers' learning environments. (Author/SLD)

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The Correlational Relationship Between Homeschooling Demographics and High Test Scores

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Abstract

Homeschooling, one of the fastest growing educational alternatives, is enjoying increasing respect by educators and parents alike. This is due in part because homeschooling children score as well as and often better on standardized tests than their publicly schooled counterparts. However, the vast majority of homeschooled students come from biological, still married households with above average incomes. Homeschooling parents also have much higher than average educations. Homeschooled students, surprisingly, also watch much less television than their publicly schooled counterparts. All of these demographic characteristics have proven to influence academic achievement. Homeschooling organizations are also completely unsure of the number of students nationally being homeschooled. It is therefore possible that the high test scores of homeschooled students are inconclusive evidence of the actual quality of homeschooling instruction; these test scores can instead be attributed to non-representative research samples and demographic characteristics of the homeschoolers' learning environments.

The Correlational Relationship Between Homeschooling Demographics and High Test Scores

Kitchen table, beach, walking the dog, religion, and laundry—what do these words bring to your mind? There are a myriad of possibilities like home, vacation, or responsibilities, but one unlikely possibility is "schooling." However, in a homeschooling curriculum meeting that I attended, every one of these words played a part.

When a very intelligent, well-educated friend asked me to attend a homeschooling curriculum meeting, I have to admit that I was a little surprised that she was considering homeschooling her children. She and her husband had been traditionally schooled in the public school system and had excelled in this setting. Although she is very religious, she is by no means extremist or fanatical. I was very curious as to why a sensible, traditional, well-educated individual was so inclined to challenge societal norms. I knew she must have her reasons, and I felt them worthy of investigation. She, on the other hand, was interested in my opinion of homeschooling as an educator. Therefore, with our respective questions lined out for each other, I agreed to attend the meeting.

I must admit that as one with educational training, I was shocked and appalled by the meeting. It opened with prayer which I felt had little to do with the validity of the curriculum. Wonderful visuals of well-groomed families with open books and polished red apples all placed around a spotless kitchen table were displayed throughout the meeting. "Weeding the vegetable garden can be a science lesson and walking the dog can be a nature experiment," the curriculum peddlers urged. The whole scene simply emoted warm fuzzies and blinded parents who desperately wanted the best for their children. I was appalled that this was considered "educational curriculum." This had nothing to do with sound instructional theories or learning

styles. Absolutely no evidence was given to support the true effectiveness of the curriculum. However, throughout the meeting, the peddlers presented standardized test statistics that argued that homeschooled students score well above the national norms on tests—significantly higher than their publicly schooled counterparts. Therefore, homeschooling was offered as a superior method of educating.

As an educator who has read much on the inaccuracy of standardized testing to determine true intelligence, learning, achievement, or even preparation, I needed more. I simply could not believe that walking the dog could prepare a student to go to college and successfully major in astro-physics. Furthermore, I was angry that well-meaning parents were being sidetracked by the idyllic climate of the meeting from their educational evaluations of homeschooling. Thus I began my investigation.

With the rise in school violence, many parents have become dissatisfied with the public school system and are seeking alternatives. "Homeschooling," according to Richard Pearson (1996, pp.2), "is one of the fastest growing initiatives in America's educational options." Over the past twenty years, the homeschooling alternative has come into being and flourished, especially in the last two to three years. Reasons for homeschooling include religion, opportunity for individualization, and parental ability to monitor closely children's learning and personal relationships (Martin, 1997).

The vast majority of homeschooling information is marketed by companies selling homeschooling curriculum, religious organizations, and the Homeschool Legal Defense Association. The researched material written by experts in the educational field which is unrelated to any biased organization is somewhat scarce. This credible information is focused largely on the high standardized test scores of homeschooled students or the demographic characteristics of

homeschooling families. Pro-homeschooling organizations such as curriculum developers and defense associations use the high test scores to encourage parents to homeschool. They also present the demographic characteristics of dual parent families with high incomes and much higher than average educations to prove that successful, sensible, well-intentioned parents choose homeschooling. The pro-homeschooling organizations also use the parents' above average educational attainments and strong supportive family system to establish the parents' qualifications as teachers. However, very little research has been done that correlates the demographics of homeschooling families with the above average test scores of homeschool students. It is possible that the high test scores of homeschooled students are inconclusive evidence of the actual quality of homeschooling instruction; these test scores can instead be attributed to non-representative research samples and demographic aspects of the homeschoolers' learning environments.

Certain homeschooling statistics are quite consistent. Since the early 1980's in Alaska, homeschooled students have been tested and proven above average on achievement testing (Frost and Morris, 1988). In 1998, the largest survey and testing program for homeschooled students to date reached the same consistent results on homeschoolers' academic achievement. The complete Iowa Tests of Basis Skills and the Tests of Achievement and Proficiency were used to assess student achievement in basic skills. Homeschooled students had a median score typically between the 70th and 80th percentiles on these tests-- the national median is the 50th percentile. The homeschooled students in grades one to four are on average one grade level above their age-level publicly and privately schooled peers, and this gap begins to widen even more at grade five (Rudner, 1999). Does this indicate that homeschooling instruction is effective, or are other factors involved?

The demographic statistics of homeschooling families are also very consistent. Ninety-seven percent of homeschooled students' biological parents are married, but only 72% of families nationwide with children enrolled in school are married-couple families (Rudner, 1999). Ninety-four percent of homeschooled students are white; the national percentage of white students is at 67.2% (Rudner, 1999). Homeschooled students' parents have much more formal schooling than the national norms. Eighty-eight percent of homeschooling parents have an education beyond high school, but only 50% of the nation as a whole has any formal education beyond high school (Rudner, 1999). The homeschooling families' median income is at $52,000 annually, yet the national median income for families with children is $36,000 (Rudner, 1999). Home schooled students also watch much less leisure television. Sixty-five percent of homeschooled children watch one hour or less of television per day, while only 25% of children nationally watch one hour or less of television per day (Rudner, 1999). It is obvious that homeschooling families are a very selective group (Rudner, 1999). Because homeschooling families differ so greatly from the national norms in family environments, these exceptional demographic characteristics flaw the validity and reliability of the above average test scores of homeschooled students.

It has been established that 98% of homeschooled children come from married families, and academic aptitude and achievement have been reported to be inferior among children of divorced parents as compared with children of intact homes (Wadsby and Svedin, 1996). In a 1985 study in Wisconsin, Roseby and Deutsch found that deterioration in school performance was one of the most consistent outcomes associated with separation and divorce (Wadsby and Svedin, 1996). Bisnaire, Firestone, and Rynard found in 1990 that there was a "significant decline" in academic performance of one third of children from disrupted families (Wadsby and Svedin, 1996). Since divorce has such negative effects on children's academic performances, it should be

no surprise that homeschooled students are above academic norms. Less than 2% of homeschooled students face divorce.

It has also been argued that parental involvement contributes to a child's academic success. "Parental involvement has an important direct, positive effect on grades" (Fehrmann, Keith, Reimers, 1987). It is obvious that homeschooling parents are more involved in their children's educations. In addition to parental involvement, homeschooling parents are also vastly more educated than national norms. This is where the expectancy theory comes to play in the homeschoolers' academic success. The expectancy theory argues that children who are expected to excel will surpass those who are not expected to excel. Because homeschooling parents appear to have excelled educationally, it is logical that they will have high expectations for their children. As a matter of fact, "parents who homeschool tend to see their children as above average, and that they expect them to achieve, both socially and academically. As a result, these children usually fulfill these expectations because of their supportive environment" (Meehan and Stephenson, 1994). The expectancy theory is also a causal factor in the homeschoolers' above average test scores.

Some researchers are concerned that being home all day will result in excessive television exposure for homeschoolers (Meehan and Stevenson, 1994). The effects of television on academic achievement are debatable, but a University of Iowa study found a small *but decidedly negative* impact of leisure television on academics (Keith, Fehrmann, Pottebaum, Aubey, 1986). Demographic surveys, however, assert that homeschoolers in fact watch much less leisure television than their publicly schooled counterparts. It is definitely a possibility, then, that the lack of television exposure to homeschooled children will at least alleviate the small negative effects that television creates.

However, one of the least consistent of all homeschooling statistics involves the number of homeschoolers. In 1988, homeschoolers were estimated to range in count from 60,000 to one million students. The author concedes that it is "difficult to tell since many families are homeschooling underground and do not show up for a count" (Meehan and Stephenson, 1994). If these underground homeschoolers do not show up for a count, it is likely that they also do not show up for surveys or testing. Holt and Associates, which publishes the pro-homeschooling magazine Growing Without Schooling, answers the question of how many children are homeschooled in the United States in this way: "Nobody knows for sure, but a researcher estimated 350,000 in the early 1990's and we guess that their are at least 600,000 in 1997. Not all states require homeschoolers to register with a central location, so not all states are able to count or even estimate the number of homeschoolers" (Holt, 1998). Even the "largest survey and testing program to date" estimates that there are between 700,000 and 1,200,000 homeschooled students in 1998—a huge range for what is supposed to be conclusive evidence (Rudner, 1999). If the actual number of homeschoolers cannot be determined, how do researchers assert that their samples are representative? The reason for this count discrepancy is said to exist because parents are forced to homeschool underground, but if a possible 500,000 students remain underrepresented, the research is not valid. Those "underground" homeschoolers may also be "truant" homeschoolers because they remain untested and unresearched. Only the parents who know that they have homeschooled faithfully and effectively would be willing to test their students, so again the research is based on a very selective group.

Brian Ray, president of the Home Education Research Institute, appears to be very pleased with the testing results, the demographic characteristics, and homeschooling in general. Surprisingly, he actually admits my thesis. "Achievement was statistically significantly related, in

some cases, to father's educational level, mother's educational level, gender of student, years home educated..." (Ray, 1997, pp. 3). However, he dismisses this relationship with no supporting evidence or justification. He simply writes, "The relationships were, however, weak and not practically significant" (Ray, 1997, pp. 3). When related to publicly schooled children, the negative academic effects of divorce, minority status, and television are considered significant. When related to publicly schooled children, the positive effects of parental involvement, parents' educational status, and the expectancy theory are also considered strong and significant. Why then does Ray feel that the relationship is "weak and not practically significant" when related to homeschooled children?

Other researchers have also recognized the relationship between the demographic characteristics and the high test scores of homeschooled students: "Evidence does not yet exist to indicate whether the children of homeschoolers are achieving at higher or lower levels of academic development in comparison to those of non-homeschoolers matched on other relevant demographic characteristics" (Groover and Endsley, 1988). Even Rudner's largest homeschooling survey concludes his article with an important admonition. He asserts that his research does not indicate that children will perform better academically if homeschooled. His research includes no information on how homeschooled children would perform in public school, nor does it consider the myriad of differences between homeschooled and publicly schooled children. "The study simply shows that parents choosing to make a commitment to homeschooling are able to provide a very successful environment" (Rudner, 1999). Parents at these homeschooling curriculum meetings should be given this information instead of only the above average test scores of homeschooled children and the polished red apples. They should be presented the information from an academic standpoint based on statistical reliability and validity

instead of only a fraction of the results. And it should be explained to parents considering homeschooling that homeschooling alone does not ensure success. The key, according to Rudner, is parental commitment to the educational environment, and that commitment will contribute to the child's academic success whether he is publicly, privately, or home schooled.

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